

U.S. Patent Application Serial No. 10/797,559
Amendment filed December 27, 2005
Reply to OA dated September 29, 2005

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (canceled)

Claim 2 (canceled)

Claim 3 (canceled)

Claim 4 (canceled)

Claim 5 (new): A shaft for rotatably supporting a roller wheel, the shaft comprising:

end portions having the roller fitted therebetween; and

a middle portion having the roller fitted thereon, the middle portion having a connection portion that extends along a diametrical direction of the shaft and further having recess portions on sides thereof,

wherein the shaft receives a load from the roller toward the diametrical direction of the shaft.

Claim 6 (new): The shaft as in claim 5, wherein the diametrical direction to which the shaft receives the load from the roller is a vertical direction, wherein a cross-section of the middle portion of the shaft includes an upper circular portion, a lower circular portion and the connection portion

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that extends vertically, wherein the connection portion connects the upper and lower circular portions and passes through the shaft axis.

Claim 7 (new): The shaft as in claim 5, wherein the shape of the cross-section of the shaft is symmetrical along the vertical direction relative to the shaft axis.

Claim 8 (new): The shaft as in claim 5, wherein each of the recess portions of the middle portion of the shaft has an opening that extends horizontally from the vertically extending connection portion, the opening becoming smaller as it extends toward the end portions of the shaft.